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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/463,001	12/05/2001	Allen W. Thorpe	7387	5754

1688 7590 03/25/2005

POLSTER, LIEDER, WOODRUFF & LUCCHESI  
12412 POWERSCOURT DRIVE SUITE 200  
ST. LOUIS, MO 63131-3615

EXAMINER
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RUDDOCK, ULA CORINNA

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/463,001	Applicant(s) THORPE ET AL.	
	Examiner Ula C Ruddock	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☐ Claim(s) 10-12, 14-19, 22-27, 35, 36 and 41-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 10-12, 14-19, 22-27, 35, 36, 41-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. The Examiner has carefully considered Applicant's response filed January 3, 2005. The rejection in view of Kirk et al. and Fritze et al. has been overcome by Applicant's response. However, despite this advance, the invention as currently claimed is not found to be patentable for the reasons herein.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 10, 12, 14-19, 22-24, 35, 36, 44, 49, and 54 rejected under 35 U.S.C. 102(e) as being anticipated by Bruer et al. (US 6,00,189). Bruer et al. disclose fire-resistant cladding used in building materials (col 1, ln 37-44). The cladding comprises glass-fiber meshes coated with intumescent composition (col 2, ln 40-44). The base materials of the composite comprises polyolefin resin (col 2, ln 50-56). It should be noted that it is a well known fact in the textile industry that glass fibers soften at 700° C or above.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 11, 25-27, 41-43, 45-48, 50-53, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Breuer et al. (US 6,000,189), as shown above. Breuer et al. disclose the claimed invention except for the teaching that the mesh has 0.5 to 30 openings per square centimeter and the specific method of making the presently claimed invention.

The number of openings per square centimeter of a mesh is a result effective variable. The number of openings directly affects the strength of the mesh itself. Therefore, it would have been obvious to one having ordinary skill in the art to have used a mesh having 0.5 to 30 openings per square centimeter, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have optimized the number of opening per square centimeter in the mesh, motivated by the desire to create a mesh have increased strength and durability.

Regarding the method claims, Breuer et al. disclose the plastic molding can be produced from the plastics by extrusion, blow molding, injection molding, and coextrusion. Therefore, although Breuer et al. fails to specifically disclose a "softening" step, it is the Examiner's position that softening of the resin material would occur when extruding, blow molding, injection molding, and coextrusion.

6. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Breuer et al. (US 6,000,189), as shown above, in view of Kirk et al. (US 5,654,063). Breuer et al. disclose the

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claimed invention except for the teaching that the substrate comprises a felted material. Kirk et al. (US 5,654,063) disclose a pressure sensitive adhesive cover comprising an intumescent material (col 4, ln 19-21). The scrim is preferably in the form of an open mesh lattice comprising fiberglass material (col 4, ln 52-54). A felted sheet (col 4, ln 67) can be used within the fiber barrier layer. It would have been obvious to one having ordinary skill in the art to have used Kirk's felted material in the cladding material of Breuer et al., motivated by the desire to increase the insulative properties of the material.

### ***Response to Arguments***

7. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C Ruddock whose telephone number is 571-272-1481. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

UCR

*UCR*

*Ula Ruddock*  
**Ula C. Ruddock**  
Primary Examiner  
Tech Center 1700